

Liaison Report – CIE Division 8 *Image Technology* – June 2003

Division Officers:

Director: Todd Newman US
Secretary: Dave McDowell US
Editor: Mike Pointer UK

The officers can be contacted via the Division 8 web site: www.colour.org

Division Terms of Reference:

To study procedures and prepare guides and standards for optical, visual and metrological aspects of the communication, processing, and reproduction of images, using all types of analogue and digital imaging devices, storage media and imaging media.

TC 8-01 Colour Appearance Models for Colour Management Applications

Year established: 1998

Terms of Reference:

To study, develop, and recommend a colour appearance model based on CIECAM97s for use in digital colour management and to develop clear usage guidelines for common applications. Consideration is to be given to colour and engineering requirements for open colour management systems.

Chairman: Nathan Moroney (nathan_moroney@hp.com)

Report:

A technical report entitled *A Colour Appearance Model for Colour Management: CIECAM02* has completed the Technical Committee ballot and has been sent to the Central Bureau for balloting and distribution.

TC 8-02 Colour Difference Evaluation in Images

Year Established: 1998

Terms of Reference:

To study and recommend methods to derive colour differences for images.

Chairman: M Ronnie Luo (m.r.luo@derby.ac.uk)

Report:

An interim report entitled *Methods for Deriving Colour Differences in Images* is being prepared by the Chairman.

TC 8-03 Gamut Mapping

Established: 1998

Terms of Reference

To study, develop and recommend an optimal solution for cross-device and cross-media image reproduction. This solution will provide a standard procedure to calculate the colour gamut of an image, an imaging system, or its components, and either one algorithm, or a set of algorithms and rules for use in specific applications.

Chairman: Jan Morovic (j.morovic@derby.ac.uk)

Report:

A technical report entitled *Guidelines for the Evaluation of Gamut Mapping Algorithms* has completed the Technical Committee ballot and has been sent to the Central Bureau for balloting and distribution.

TC 8-04 Adaptation under Mixed Illumination Conditions

Established: 1998

Terms of Reference:

To investigate the state of adaptation of the visual system when comparing soft-copy images on self-luminous displays and hard copy images viewed under various ambient lighting conditions.

Chairman: Naoya Katoh (naoya@color.sony.co.jp)

Report:

A draft technical report entitled *Adaptation when Comparing Softcopy and Hardcopy Images under Mixed Illumination* is being considered by the members of this committee.

TC 8-05 Communication of Colour Information

Established: 1999

Terms of Reference: (from <http://www.colour.org/tc8-05/>)

To standardise a minimal set of techniques that enable unambiguous and efficient communication of the colour information in images. Two fundamental approaches will be addressed:

1. The association with the image data of additional data that describes the colour space of the image data.
2. The representation of the image data in a standard colour space.

The standard will also define a minimal set of standard colour spaces that addresses a wide range of imaging applications. Whenever possible, existing standard colour spaces will be used in preference to creating new ones.

Chairman: Robert Buckley (rbuckley@crt.xerox.com)

Report:

A first draft of a Technical Report is being considered by the members of the Committee.

TC 8-06 Image Technology Vocabulary

Established: 2000

Terms of Reference:

To liaise with other Division 8 Technical Committees and collate definitions of terms associated with image technology.

Chairman: Janos Schanda (schanda@ella.hu)

Report:

The Chairman has been collecting terminology for the report.

TC 8-07 Multispectral Imaging

Established: 2002

Terms of Reference:

Chairman: Patrick Herzog (p.herzog@color-experts.de)

Report:

The TC was formed in 2002 and held its first meeting in November of that year. The TC is still formulating a plan of work.

R8-04: Effect of fluorescence on colour characterization of image reproduction media

Reporter: Danny Rich

A report is nearing completion.

New Work Proposed in San Diego

TC 8-08 Testing Spatial Colour Appearance Models

Terms of Reference:

To design, implement and report the results of a psychophysical test comparing the output of spatial appearance models (including Retinex, MOM, iCAM) for high dynamic range still colour images.

Chairman: Garrett Johnson?

R8-05 Mark Fairchild *Image appearance*

Terms of Reference:

To investigate and report on research extending colour appearance models to include properties of spatial vision for static images and scenes with particular focus on:

- Spatial filtering for image difference metrics
- Spatial adaptation for image rendering

- Potential interactions between the above

R8-06 Nathan Moroney *Image appearance*

Terms of Reference:

To monitor the response to CIECAM02. This includes answering questions, reviewing the literature and recommending future activities.

Next Meeting

The next formal meeting of the Division will be in Scottsdale, Arizona in November 2004.